

SECTION 5.0 MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS

p. 1-2, Section 1.2: replace the third paragraph with the following:

The expected benefit of the Project would be the provision of a new source of supply in the Western electricity market, which has demonstrated the capability of dramatic price increases during periods of scarcity. The Project's power output would be used by electricity customers in the Western market. The Project would indirectly benefit all customers in the Western Interconnection by enhancing regional reserves and increasing the level of generation reliability in the West and in Montana. The Project will increase the degree of competition in Montana and in the Western power market, by competing with other independent generators and power marketers for supplying wholesale and retail customers and would exert downward pressure on the price of electricity.

p. 2-19: Section 2.1.1.6.1, replace fourth sentence with: "The proposed diversion of 6.19 cfs would use direct-flow water rights historically used for industrial purposes by diversion of water from Warm Springs Creek at Meyers Dam."

p. 2-25: Section 2.1.1.7.2, second paragraph, replace third sentence with: "For discharges to Sheep Gulch, TSS, oil and grease, free available chlorine, effluent toxicity, and only chromium and zinc would be limited in the permit. Discharges to the LAD are only limited for TSS and total recoverable chromium and zinc."

p. 2-33, Section 2.1.2.3, second paragraph, second sentence will be replaced with: "This new compressing station would consist of three 1,600-horsepower units, identical to the gas turbines at Mainline #3."

p. 2-48, Section 2.1.2.11, ROW Crossings of Water Bodies, first paragraph, last sentence will be changed from "The two rail lines in this area would also be bored at the same time" to "The directional drill of Silver Bow Creek would also cross the two rail lines in this area."

p. 2-51, change subheading title Directional Boring Methods to: "Directional Drilling Methods."

p. 2-51, Directional Boring Methods, change the first sentence to read as follows: "A small diameter pilot hole would be drilled along a designed path entering and exiting the ground at an 8-18 degree from horizontal."

p. 2-59, First bulleted item in Section 2.2.1.2, 13th line, delete: "for the critical fish habitat period of April 1 through November 30" and replace with "throughout the year"

Page 2-59, Section 2.2.1.3, following the section heading to add the following paragraph:

LAD Monitoring Action: if monitoring determines adverse changes in soluble salts, soil nutrient and metal concentrations, soil infiltration and percolation rates, and overall changes in site productivity, CES would develop a "site specific" remediation plan and LAD operation plan at the request of DEQ.

p. 2-59, Second bulleted item in Section 2.2.1.2, replace “from April 1 through November 30” with “throughout the year”.

p. 2-63, Add to bottom of page:

Section 2.2.2.6 Infrastructure

Develop an Emergency Response Plan which includes but is not limited to: Notification system for local emergency services, et al; rerouting traffic; detour route for commercial trucks (interstate route only); actions to minimize affected area; repair of the affected roadway and right-of-way; repair of the detour route(s).

p. 2-73, 2.4.2.2.5, Derivation of the Proposed Action, Compression: second bullet “Mainline #1 – a replacement of two existing Cooper-Superior compressor 1,100 units with two, 2,000 Hp units resulting in a net increase in station horsepower of 1,800 hp” will be replaced with “Mainline #1 – an addition to the existing station of one 2,370 Hp unit.”

p. 3-3: Section 3.2.1.1, first paragraph, third sentence, replace Silicon Valley Technology Park with Silicon Mountain Technology Park.

p. 3-11: Section 3.2.1.5, add sentence at the end of the section: “The Butte-Silver Bow Greenway, including the 3-mile segment that is located adjacent to the Technology Park and proposed generation facility, will include an extensive trail system, native planting for wildlife habitat, natural stream channel restoration, interpretative exhibits, and trailhead parking and restroom facilities for visitors.”

p. 3-15: Section 3.2.2.1.2, first paragraph, last sentence, replace Table 3-1 reference with Table 3-2.

p. 3-15: Section 3.2.2.1.2, second paragraph, replace second and third sentence with: “MPC is currently considering two adjacent site (Figure G-11) located approximately 17 miles northwest of Helena, near Silver City, in Lewis and Clark County, Montana.

p. 3-15: Section 3.2.2.1.2, Subheading *Existing Land Use*, first paragraph, delete second sentence “Development, however, has recently increased and has occurred adjacent to Canyon Creek.” Third sentence that begins with “Development has also increased ...,” delete the word “also.”

p. 3-24: Mainline #1 Compressor Station: First and second sentence will be replaced with “The upgrade that is proposed for Mainline #1 Compressor Station east of Cut Bank would occur within the existing yard. There will be a new structure to house the new compressor.”

p. 3-24: Section 3.2.2.3, second paragraph, last sentence, replace “state highway” with “county road.”

p. 3-27 and 3-28: Change all of the ‘Duncan’ citations to ‘Duffield’

p. 3-27. In the third line of the second paragraph, replace the second sentence with the following sentence: "Sport fishing has a beneficial economic use value to local and out-of state anglers, creates revenue for local business, and creates jobs for outfitters."

p. 3-27: The entire third paragraph should be replaced with the following two paragraphs:

"Although no official price tag can be put on this fishery, the 'net economic value' of its angler and outfitter use can be estimated from available survey data. This 'net economic value' provides an estimate of the annual economic worth of this fishery resource to all those that fish it, including locals and out-of state anglers. A broad-based mail survey was conducted in 1989 for the Montana Department of Natural Resources and Conservation (Duffield et al, 1990). This study estimated the net economic value of a *recreation* trip day (includes more than fishing) in the Missouri River Basin. This study was one of the most comprehensive done for recreation values in Montana and was the most recent done for the area encompassing the fishery of concern.

The 'net economic value' of a recreation trip day in the Missouri River Basin is the extra amount of money a person would be willing to spend for that trip day over and above what they actually spent. It is the appropriate measure for the economic use value of that river to fishermen. The total value of the fishery in terms of fishing use can be estimated by multiplying the 'net economic value' per recreation trip day in the Missouri River Basin by total angler days in the fishery. Because the net economic value of a recreation day is typically much less than that of a fishing day (or angler day) for most rivers, this per-day value can be considered a conservative estimate. Total annual angler days on the fishery of concern can be derived from table 3-10 above which uses 1999 Montana Fish Wildlife and Park data."

p. 3-27: Replace the entire paragraph starting on page 3-27 and continuing on page 3-28 with the following three paragraphs:

"The 1990 DNRC study calculated net economic value on a per-day basis in the Missouri River Basin. About one-half of all 1989 recreation days in the entire basin and in the fishery of concern were for fishing (Duffield et al, 1990). The study found that the average Montana resident net economic value per day of a recreational trip in the Middle Missouri Basin (from Three Forks to the Marias River) was \$85.90 in 2001 dollars. The study also found that non-residents had average values per recreation day on the entire Missouri River Basin of \$275 in 2001 dollars.

The resident trip day value of \$85.90 is in line with an earlier Montana study that focused on *fishing solely*. Duffield, Brooks and Loomis (1987) estimated the economic value per day of stream fishing in Montana to average between \$78 to \$168 (2001 dollars) using an economic Travel Cost Model. The \$85.90 figure from the 1990 DNRC study is within that range. In that same 1987 study, they estimated a specific economic value of \$72 per day for fishing the Missouri River from Holter to Cascade in 2001 dollars, which was below the average stream value and a bit below the \$85.90 figure from the 1990 study. The \$72 per day for fishing is probably significantly higher today in real dollars due to the

classification of that stretch of the Missouri as a World Class fishery and the greatly increased number of angler days on that river stretch. Thus, the \$85.90 recreation day figure is probably close or less than the value of a fishing day in the Missouri River between Holter Dam and Cascade and in the Dearborn River. A second study sheds more light on this \$85.90 figure, and argues that it is an appropriate conservative value estimate.

The resident trip day value of \$85.90 was well below the estimated day value in a second Montana study that focused on *fishing solely*. Duffield and Allan (1988) used a dichotomous choice Contingent Valuation Model to estimate the value of fishing on 19 of the better trout streams in the state and came up with an average value of \$178 per day for all anglers. This number was more than double the \$85.90 figure, because a fishing day tends to be worth more to recreationists than the average recreation day which includes all activities. Also, the \$178 value was estimated for Montana's top trout streams. Finally, different models and survey populations may have accounted for some of the difference. To be fair and conservative, the \$85.90 figure from the 1990 DNRC study is used to represent the value of a resident fishing day in the fishery of concern between Holter Dam and Cascade. The \$275 figure from the same study is used for non-residents (out-of-staters)."

p. 3-28 of the DEIS, First full paragraph, add the following two sentences to the end of the paragraph:

"Clearly, the number of anglers days is steadily increasing over time as evidenced by 111,203 angler days in 1999 (versus the 80,538 angler day five year average used to value this resource). In this vein, the average angler day number and fishery total use value number calculated below can be considered conservative (and potentially as much as 30-40% below actual 2001 numbers)."

p. 3-28: Replace the first sentence of the second full paragraph, with:
"Multiplying 65,115 resident angler days by \$85.90, the estimated net economic value per resident fishing day trip, results in an annual resident economic fishing use value of \$5.59 million for the rivers within the fishery potentially affected by the pipeline expansion.

p. 3-28: In the third sentence and last sentence of the second full paragraph, replace '\$9.75 million' with '\$10.46 million'.

p. 3-28: In the second full paragraph, make the last two sentences a footnote.

p. 3-28: On the sixth line of the second full paragraph, after the sentence that ends with '...net economic value for the fishery alone', add the following sentence:
"This \$10.46 million figure does not represent the impact on the fishery from the pipeline, but only the annual economic fishing value of the fishery itself."

p. 3-28: Replace the third full paragraph with the following paragraph:

"There is a second important component of economic value that this fishery provides to the local economy. It is the amount of expenditures that go to local

businesses from *out-of-state* anglers as a result of the fishery that would not have gone to local businesses without the fishery. From a distributive point of view and the point of view of Montana businesses, this additional expenditure is a local benefit from the fishery. This expenditure amount can be estimated. The DNRC study found that the average expenditure per day on rivers and streams within the Middle Missouri Basin was \$318 for non-residents in 2001 dollars. Multiplying this figure by the total non-resident angler days, 17,717, results in total annual non-resident expenditures in the fishery of \$5.63 million. This is an estimate of the annual benefit to local businesses from the fishery of concern. Again, it does not reflect any impact from the proposed action, but only the benefit that the fishery provides to the local economy."

p. 3-28: Delete footnote 2 at the bottom of the page.

p. 3-29 of the DEIS, First full paragraph, add the following two sentences to the end of the first full paragraph:

"For example, the Montana Board of Outfitters reports 4,758 outfitter days in 2000 for the Missouri River from Holter Dam to Cascade, which is five times higher than the 10-year old number of 942 used to value this fishery. Therefore, the outfitter estimate used to value this resource could be several times less than the actual outfitter activity today in 2001."

p. 3-29: In the second paragraph, on line five at the end of the second sentence, add the following parentheses to the end of that sentence: "(\$1.4 million = 10.5% of \$13.8)."

p. 3-29: In the second paragraph, delete the second to last sentence: "The \$1.4 million number has already been counted in the \$20.5 million total..."

p. 3-29: At the end of the second paragraph, add the following sentence:
"Also beyond the scope of this analysis is any negative effects that damage to this fishery might have on real estate values in the nearby area (especially those properties on the river)."

p. 3-29: replace the short third paragraph with the following:
"To sum up, the fishery between Holter Dam and Cascade bridge has an estimated annual economic angler use value of \$10.46 million, supports about 28-30 outfitter jobs, helps support local businesses with about \$5.6 million in out-of-state expenditures, and has some intrinsic value that is not measurable within the scope of the EIS."

p. 3-29: Section 3.3, Geology Resources, first paragraph, fifth sentence: remove "Cutbank" from sentence to read as follows: "The Choteau Loop lies along the Northern Great Plains."

p. 3-47: Section 3.5.1.2, replace third sentence with: "The residue of the storage and storage rights are made available to ARCO Environmental Reclamation, Limited (AERL) under AERL's water service agreement with BSB for beneficial uses designated by AERL, which may or may not include instream flow to benefit the fishery resource of Warm Springs Creek."

p.3-47: Section 3.5.1.3, replace first sentence with: "The proposed CES plant site gently slopes downhill to the northwest towards Silver Bow Creek."

p. 3-178: Peregrine Falcon: The fourth, fifth, and sixth sentences beginning with "An historic eyrie ..." and ending with "... on July 11, 1999." will be deleted.

p. 3-114: The third line on that page has a typo. Change 'industries' to 'industry'.

p. 3-115: The seventh line on the page, add 'for the state' after the word '1998'.

p. 4-5, Section 4.2.1.1.2 Visual Resources, add the following paragraph to the end of the section: Future viewers such as recreationists using the Butte-Silver Bow Greenway, as well as current viewers, would see the generation facility and vapor plume. The long-term presence of the generation facility and vapor plume would not be out of context with the current industrial uses and existing setting. Aesthetic and recreation impacts to current and future viewers would be adverse but less than significant.

p. 4-5: Section 4.2.1.1.3, add the following at the end of the section: "The addition of the generation plant and associated vapor plume to the existing setting surrounding the Technology Park could detract from the recreational experience of some current and future viewers. The generation plant would not be out of character with past, present, and future uses in the Park. Aeronautical safety marking that could be added to the exhaust stacks would likely be visible from portions of the proposed greenway. The visibility of safety marking for the generation plant would be an adverse but less than significant impact, and would be in addition to other existing aeronautical safety marking that is adjacent to the proposed greenway."

p. 4-12: Wolf Creek Loop and Mainline #3 Compressor Station, third paragraph, third and fourth sentence "Work involving upgrading of the existing compressor station would be confined to existing buildings within the property. Impacts to visual resources would be negligible." will be replaced with: "Work involving upgrading the existing compressor station will be confined to existing areas. Visual impacts will include an additional building(s) and equipment matching the structures and equipment currently at this location. Impacts to visual resources would be negligible."

p. 4-13: Mainline #1 Compressor Station, replace paragraph with: "Work involving upgrading the existing compressor station will be confined to existing areas within the property owned by MPC at this location. Visual impacts will include an additional building(s) and equipment matching the structures and equipment currently at this location. Impacts to visual resources would be negligible."

p. 4-13: Replace the first line of the last paragraph to: "An adverse and significant recreational and economic impact from pipeline construction could occur on the Dearborn River and Missouri River fishery discussed in Chapter 3."

p. 4-14: In the first line on the page, add the words 'and significantly' after the word, 'adversely'.

p. 4-14: In the third paragraph, sixth line, change the '\$20.5 million' to '\$10.46 million'.

p. 4-14: Replace the last sentence of the third paragraph with: “Damage or loss of this recreational fishing resource for even a year or two would constitute a significant impact on recreation. Again, it is the increased risk of Whirling disease from the pipeline crossing that has the most potential for a longer-term adverse effect.”

p. 4-28: second paragraph, replace last sentence with: “If Silver Bow Creek’s water classification changes due to remediation and restoration actions in the drainage, the MPDES permit would be modified to incorporate additional limitations in compliance with a revised stream classification, if necessary, to prevent harmful impacts to aquatic life and other beneficial uses.”

p. 4-34: Hydrostatic Testing, second line, replace “8.6 million gallons” with “7.5 million gallons” to match reference in Table 2-5.

p. 4-37: Table 4-6, first row, Impact Severity column of the DEIS will be changed in the Final EIS to read as follows: “significant. Refer to Section 4.9.1 for details of impact.”

p. 4-41: Section 4.6.1.2, Natural Gas Pipeline, Silver City Loop and Mainline #4 Compressor Station, third paragraph, “Approximately 20 acres” will be changed to read “Approximately 5 acres.”

p. 4-52: Table 4-13, first row, Proposed Mitigation Measure column, replace MPC with CES to read as follows: “Regular CES inspections to insure that contractors comply with CES and permit mitigation measures.”

p. 4-67, revise Table 4-20 as shown below:

Table 4-20: Direct Flow Water Rights from Warm Springs Creek

Water Right User	Direct Flow Water Right (cfs)
ARCO	6.25
Butte- Silver Bow	38
Major irrigators	46
Unallocated Butte-Silver Bow water	24

Source: ARCO 1996

p. 4-67, Fifth paragraph, delete “during biologically important periods of the year for trout”.

p. 4-67, Sixth paragraph, replace “from April 1 through November 30” with “year around”.

p. 4-70: last paragraph, replace fourth sentence with: “If Silver Bow Creek’s water classification changes due to remediation and restoration actions in the drainage, the MPDES permit would be modified to incorporate additional temperature limitations in the discharge water.”

p. 4-72: Stream Crossing Method: delete the last bulleted item.

p. 4-74, 3rd sentence, 2nd paragraph under 4. Substrate Composition: delete the words “or boring”.

p. 4-83: 1st sentence in 2nd paragraph: delete the words “or boring”.

p. 4-84: Teton River, first sentence, replace “need to be bored” with “need to be directionally drilled.”

p. 4-89, Section 4.10.1.1.2 Table 4-29: change the cooling towers stack diameter to 23 ft

p. 4-89, Section 4.10.1.1.2 under Emission Rate end of first paragraph delete “twelve” replace with “nine”

p. 4-89, Section 4.10.1.1.2 prior to Table 4-30 add, “The potential emissions generated from the cooling towers has changed because of a change in the design of the towers. The emissions in Table 4-30 have been changed to reflect the new emission values. However, because the emissions have decreased, the modeling analysis that is contained in Section 4.10.1.2 was not re-analyzed. The modeling analysis demonstrated compliance with the appropriate rules and regulations and are considered more conservative values. The modeling analysis still represents an emission rate of 1.45 lb of salt per year from the cooling towers.”

p. 4-89, Section 4.10.1.1.2 Table 4-30 the cooling towers PM-10 emission rates should be 0.6002 lb/hr, delete 1.45, and 2.63 tpy, delete 6.35.

p. 4-96, Section 4.10.1.2.5 first paragraph delete that last sentence and add the underlined phrase to the second to last sentence “ The manufacturer Duke/Fluor Daniels reviewed the design of the cooling towers and made some revisions in the design that decreased the potential emissions.”

p. 4-96, Section 4.10.1.2.5, second paragraph, first sentence, delete 1.45 and replace it with 0.6002 – second paragraph delete the last sentence “Figure 4.1 Total annual nitrogen deposition”. The figure is referenced in the section above, which is the proper place.

p. 4-99, Section 4.10.1.2.5, Table 4-40, the stack diameter should be 23 ft and delete 30 ft – and the table footnote should be updated to $(0.6002 \text{ lb/hr}) \cdot (4046.87 \text{ m}^2/\text{acre}) / (453.59 \text{ g/lb}) / (9 \text{ sources}) = 0.595 \text{ lb/hr}$

p. 4-99, Section 4.10.1.2.5 Table 4-41 column Highest Impact (lb/acre) should be changed to

9.4 delete 19.6
15.8 delete 32.8
14.6 delete 30.6
15.7 delete 30.5

p. 4-100: First paragraph, last sentence, delete and replace with the following: “Without stationary air masses, the constituents of photochemical smog would not remain in the area long enough to build up or react.”

p. 4-101: Add the following column to Table 4-43:

Emissions (tons/year)

2,375,720
42.7
4.3

p. 4-107: Section 4.10.2.5.1, Dust Emissions and Control, first paragraph will be changed as follows: "Construction would include the addition of one 2,370-horsepower compressor engine."

p. 4-113: Section 4.11.1.2.4, Mainline #1 Compressor Station, delete the third sentence.

p. 4-119: In the paragraph in the middle of the page, replace the first sentence with this sentence: "Economic impacts would occur when changes in any of the economic indicators listed above are substantial, generally meaning 5 percent or more in any year."

p. 4-119: In the middle of the page, make the first bullet under the first full paragraph a regular sentence (without the indentation or bullet).

p. 4-120: To the four bullets at the top of the page, add the following bullets:

- Total county personal income, total local area jobs, or total local tax revenues fall by 5 percent or more.
- Total local government spending/resources increase by 5 percent or more.
- A change in locally generated revenue from a natural resource such as a fishery or nature trail decreases by 5 percent or more on a county-wide level.

p. 4-120, 4-121: Replace the first 6 paragraphs under the heading '4.13.1.1 Generation Plant' on page 4-120 with the following 8 paragraphs:

"In this sub-section, 'local society' refers to Silver Bow County residents and downstream water users from the proposed generation plant (some of whom live in Deer Lodge County) who are expected to bear the vast majority of economic impacts from the plant and associated power line. Local society is the primary focus of the socioeconomic analysis for the proposed generation plant and pipeline. Locally, the socioeconomic benefits of the proposed plant and power line are expected to exceed costs. Neither benefits nor costs from the plant are expected to be significant.

Later in this section, economic impacts of the plant for the nation as a whole will be briefly analyzed. At this national level, determining whether plant benefits outweigh costs is largely beyond the scope of this EIS. The best that can be done at a national level is to qualitatively list those economic impacts, none of which are expected to be significant to the U.S.

From the point of view of local 'society' as defined in the previous paragraph, the main benefit from the plant would consist of that portion of CES revenue from electricity sales that would flow to SilverBow County and parts of Deer Lodge County in the form of economic stimulation. This stimulation would include new jobs, additional worker income, and additional tax revenue that would benefit local residents. The total economic stimulation that would benefit local society is calculated at \$32.25 million over the 30-year life span of the plant. This \$32.25

million is explained in more detail below and although it is a large number, it is not considered significant over the 30-year life of the plant compared with the current economic activity in the local (Butte) area.

The main cost to local society from the plant would be those burdens borne by local residents that would not be compensated for by CES. The most important of these costs under the Proposed action is expected environmental damage not mitigated by the plant. This damage would be borne as a cost by those local residents who use and depend on and enjoy those natural resources/amenities. Such natural resources affected by the proposed plant would include the fishery in Warm Springs Creek and the proposed Butte-Silver Bow Greenway. Mitigation measures have been recommended for Warm Springs Creek that would minimize damage, but actions under the proposed action would still have a significant adverse impact on the fishery there and therefore an adverse impact on economic use value of that fishery (through fish depletion-see Fisheries section 4.9.1.1.2). This adverse fishery impact, while potentially important to local residents, would not be economically significant to Silver Bow County as a whole as it would not affect any country-wide economic indicator by 5% or more.

Costs to local society as a result of the plant would also consist of the additional services provided by the local government such as police service and social services as a result of the plant and its in-migrating workers. None of these effects would be significant (as explained below) and extra costs that do occur would likely be more than compensated by the additional local tax revenue the plant generates. Thus, costs from the plant overall are not considered significant overall to local society.

It is now time to look in more detail at local societal benefits and costs from the plant, since that is the main focus of this analysis. Some of the plant-related revenue that would be earned by CES from electricity sales would constitute the main benefits to local society. These benefits would be in the form of economic stimulation that would not otherwise occur without the plant (including jobs, income and tax revenue).

[Start back again on the second full paragraph on page 4-121]

p. 4-121: In the second full paragraph on page 4-121, delete the first two sentences.

p. 4-122: In the third line on the page, replace "less than 1 percent", with '1.25 percent'.

p. 4-122: In the first full paragraph on line three after the words 'without the plant' and before the parentheses, add the words, "consistent with the county average in construction".

p. 4-122: In the last line of the first full paragraph, add the word 'local' before the word 'society'.

p. 4-123: In the second full paragraph, add the following sentence after the second sentence: "These costs would be more than compensated by tax revenues from the plant."

p. 4-123: Delete the third full paragraph and replace it with the following two paragraphs:

“There would be local costs from adverse effects on natural resources that would not be compensated by the plant. One of these costs, as mentioned earlier, would involve the adverse economic impacts on the use value of Warm Springs Creek fishery from de-watering under the Proposed Action. Although this is not a nationally famous fishery, it *is* used by local residents who logged about 5,842 angler days in 1999 (Montana Fish, Wildlife and Parks). These days have some use value by local residents and that value could be diminished depending upon adverse effects to the fishery from de-watering. To the extent that fishing use value was diminished, that loss or cost would be borne by local residents who use that resource. Any economic loss from Warm Springs Creek is expected to be insignificant at the county level (for Silver Bow and Deer Lodge counties)

There would be other adverse impacts on local natural resources from the plant, none of which are considered significant. The effects from the plant on the proposed \$20 million Butte-Silver Bow Greenway, which is slated to be a national tourist destination, would be adverse from the visible emissions plume and not significant, since the local area already has an industrial character to it. This could have an adverse effect on tourist revenue going into the local economy. Because the area is already of an industrial character, these effects are not expected to be significantly adverse or significantly affect visitor days. Air emissions from the plant are not expected to cause any additional health costs locally, since they are projected to meet National Ambient Air Quality Standards designed to protect health. There would be some increases in arsenic in Sheep Gulch from the plant, which is not considered significant (see section 4.5-Water Resource). Despite these adverse effects, it is important to note that CES has proposed mitigation for land, visual, vegetative and water resources under their proposed action. Agency-preferred mitigation alternatives beyond those considered under the proposed action would in some cases significantly reduce the identified adverse impacts and thus the economic costs from the plant that society would have to bear.”

p. 4-123: To the fourth full paragraph, add the following sentence: “This is based on the assumption that the economic cost from the adverse effects to the Warm Springs Creek fishery and Butte-Silver Bow Greenway, plus the cost of additional local services will be less than the \$32.25 million in expected local benefits. This is very likely to be the case with the mitigation actions proposed by CES over the life of the plant.

p. 4-123: After the fourth full paragraph and before the heading entitled ‘4.13.1.3 Natural Gas Pipeline’, insert the following paragraphs:

“There would be some benefits and costs from the plant that extend beyond local society. On a state level, the main plant benefit would involve additional state-level taxes paid by the plant that accrue to the Montana General Fund including the Corporation Tax, energy producer’s license tax and wholesale energy transaction tax. No estimates are currently available for these monetary amounts. State-level benefits from the proposed plant might also involve lower prices to electricity consumers in Montana from. The CES-produced electricity itself may additionally benefit Montana residents by putting downward pressure

on in-state prices during periods of interstate transmission congestion. Transmission congestion of electricity flowing (mainly) west out of Montana would mean that CES would likely have to sell more of its electricity in-state during that time than it would otherwise without congestion (when the lines are not congested, most of CES's energy would likely flow to out of state users). Most Montana residential and small commercial customers are served by MPC out of an energy supply portfolio locked in with long-term contracts. For the portions of the portfolio not locked in, any additional electricity supplied by CES in-state (during times of congestion) could increase the supply of available in-state electricity and subsequently exert downward pressure in the short-run on prices paid by MPC in Montana. This could mean temporarily lower electricity bills for Montanans than what would occur without the plant. It is important to note, however, that Montana does not need this energy right now to meet its needs and is not suffering an energy shortage.

Over the long run when MPC contracts with energy suppliers expire, the additional supply of CES-generated electricity may offer some longer term savings to Montana users if there is still congestion out of Montana. The same scenario could be true for large industrial customers. The amount of savings and economic benefit, if any, that would accrue to Montana users as a result of CES-produce electricity is unknown. It is likely that the economic stimulus to Silver Bow County discussed above would be the most visible benefit to Montanans from the plant. It is important to note that the lines running out of Montana are currently congested only 8% of the time, meaning that CES would usually be able to ship out its electricity (during which time Montana would not accrue that potential benefit).

While this analysis is concerned mainly with the economic effects to local Montanans, it is important to note that the proposed Silver Bow plant would result in economic benefits and costs on a national scale, both of which would be very small and insignificant. The main benefit of the plant would be to the entire U.S. Western Interconnect in the form of the electricity generated. While the U.S. West will likely be able to use the energy, it is not clear that there is currently a shortage of energy as there appeared to be in 2000-2001. The Western Interconnect consists of the electricity grid that is located from approximately Montana, Wyoming, Colorado and New Mexico to the West Coast.

Because 500 MW would not have a significant effect on electricity prices in the large U.S. Western Interconnect, the economic benefit would be mostly in the form of the additional electricity supply. This additional supply would be very small (less than 1%) compared to the generation on the entire system. The national-level benefit from increased electricity supply to the Western Interconnect would be represented by the total revenue from electricity sales that accrue to CES, assuming a competitive energy market. Again, only that portion of CES revenue from electricity sales that would flow to Silver Bow County in the form of economic stimulation would benefit local Montanans. There would also be the benefit from higher income and jobs to those plant workers (in the initial two years) that come in from out of state. Using assumptions made above, the benefits to those 'out of state' plant construction workers would be about \$12 million and about 350 jobs over two year, none of which would directly benefit Montana.

On a national scale, the main societal costs of the plant and transmission line would be the opportunity cost or real resource cost of not using these resources for the next best societal use (e.g. health, defense, road improvement, education, etc.). All projects have such a societal opportunity cost. This opportunity cost would be equal to the cost borne by CES for plant construction and operation, assuming that local labor and capital markets are competitive. CES's plant related costs would include wages and worker benefits, materials, equipment, operations, natural gas consumption (to run the turbines), transmission fees, taxes, environmental mitigation, and other capital costs. Continental has taken an initial step to minimize their costs by choosing the least-cost (conventional) way to generate 500 MW of electricity in Montana-natural gas.

There would be some cost to the nation (and beyond) from the air emissions generated by the plant. Such costs might include contributions to greenhouse gases in the atmosphere. However, all Silver Bow emissions would meet National Ambient Air Quality Standards which are designed to protect human health. Also, the emissions would not occur next to any large cities, so these air emission costs are expected to be very small and insignificant on a national level.

It is important to note that alternative methods for securing a national energy supply might be just as economical or more economical for society than a natural gas fired plant. Electricity conservation, for example, has often been demonstrated to be cheaper than building new generation. However, it is up to CES (and not this EIS) to make the business decision of whether to build or not, and whether there is a market for their electricity.

p. 4-123: At the end of the first paragraph under the heading 4.13.1.3 Natural Gas Pipeline, add the following sentence: "Because there are no expected effects at a national level from the pipeline expansion, the socioeconomic analysis focuses solely on the five county area".

p. 4-123: Add the following sentence to the one-sentence second paragraph under the Natural Gas Pipeline heading: "Both benefits and costs are expected to be insignificant overall, with the exception of the fishery in the Missouri River between Holter Dam and the Cascade bridge."

p. 4-124: In the first full paragraph, second line, add the word, 'beneficial' before the word 'additional'.

p. 4-124: After the first full paragraph, add the following paragraph:

"The main societal cost of the pipeline to Montanans would be the potential damage to a \$10.46 million fishery on the Missouri River between the Holter Dam and Cascade Bridge. Otherwise, there are no significant costs identified from the pipeline. If the fishery were significantly damaged, this would result in a significant impact to an economic resource in Montana and the portions of the local economy that depend upon that resource. It is not known how much of the value of the fishery would go down if it were significantly impacted, but probably it would be a small fraction of the \$10.46 million for one or two years. If insignificant or no damage occurred to the fishery, then the value of the fishery would remain unchanged by the pipeline. Any adverse effects on other types of natural resources and recreation from the pipeline are expected to be short-term,

adverse and insignificant in social and economic terms. This includes the proposed Butte-Silver Bow Greenway for which the Silver Bow plant fits the character of the area. The potential impact to the Missouri River fishery is described in Section 4.9.1.2.8. The potential impact to recreation is described in Section 4.2.1.2.3.

p. 4-124: Add the following sentence onto the beginning of the second full paragraph that begins with “The gas work would take place...”:

“The societal benefits from the pipeline are now looked at in more detail. In all, local benefits from the pipeline expansion are projected at \$2.25 million in additional worker income, 100 jobs over one year on average, and an undetermined amount of additional tax revenue. Overall, this benefit is expected to be insignificant on the five county area relative to the current economic base there. Glacier County would likely feel the greatest effects due to its relatively small economic base.”

p. 4-124: In the third line of the fourth full paragraph, change “\$5-7 million” to “\$1 million”.

p. 4-125: Delete the fourth full paragraph.

p. 4-126: Replace Table 4-60 with the following Table 4-60:

Table 4-60: Summary of Social and Economic Benefits and Costs of the Project

	Generating Plant		Pipeline	
Impact Item	Benefit	Cost	Benefit	Cost
Benefits and Costs to the National (U.S.) Economy				
United States overall (outside of Montana)	500 MW electricity, \$9 million in higher wages	Air emissions (projected to meet federal standards)	None identified	None identified
Continental Energy	Revenues likely to exceed costs over life of the plant			
Benefits and Costs on the Local Economy				
Employee Wages	\$ 30,000,000	-	\$ 2,250,000	-
Short-term construction jobs	350 on average over 2 years	-	100 over 1 year	-
Long-term jobs	25	-	0	-
Local business sales	short-term boost	\$0	insignificant	Potentially adverse near Missouri R.
Royalties and taxes	unknown increase	\$0	unknown	\$0
Impact on:				
Infrastructure	increased funding	small increase in demand	insignificant	insignificant
Schools/Educ	increased funding	small increase in demand	insignificant	insignificant
Local Communities	increased funding	\$0	insignificant	insignificant
Housing	Less vacancies	small increase in demand	insignificant	insignificant
Public services	increased funding	small increase in demand	insignificant	insignificant
Electric Utilities	None identified	Less transmission capacity for future generators	NA	NA
MPC Gas system	None identified	Higher peak usage loads	Benefit: Increased gas reliability	
Environment	No significant benefits identified	Adverse, insignificant effects on local land, air, and water including Warm Springs Cr. & Greenway	None identified	Potentially significant and adverse on \$10.5 million fishery that provides 30 jobs
Montana Total	\$ 30,000,000	\$0	\$ 2,250,000	\$ risk to fisheries

note: Local economy for the generation plant includes Silver-Bow county and for the pipeline includes the five-county area crossed by the pipeline and Cascade and Pondera Counties

p. 4-126: Replace the first sentence of the first paragraph with: ‘The mitigation alternative, specifically the mitigation measure to employ a trenchless crossing of the Dearborn River, would reduce the significant adverse economic impact on the fishery to an insignificant adverse economic impact. The mitigation alternative to maintain adequate instream flows in Warm Springs Creek would also limit the adverse impact on that fishery and perhaps even benefit the fishery.’

Page 4-140 paragraph 4, add after third sentence: “While spawning trout are unlikely to be affected, other life stages that are present in streams year round, such as eggs or juveniles, would be adversely impacted by chronic low flows.”

p. 4-142: In the fifth line of the first full paragraph, replace “the proposed Silver Bow” with “CES”. At the end of the fifth line, add the following sentence: “As a result, taxpayers or someone else may have to pay those costs.”

p. 4-144: Table 4-67, Potential Impact column, replace first row with: “Discharge limits set in the MPDES wastewater permit for Sheep Gulch are based on narrative, water quality, and technology standards associated with this ephemeral drainage. B-1 Classified waters downstream could be impacted and water quality standards exceeded for this classification.”

Page 5-1: paragraph 2, replace fourth sentence with: “DEQ is required under Section 75-5-318(2), MCA to impose reasonable alternatives that would preclude the need for a short-term narrative (turbidity) standard. Accordingly, DEQ will require directional drilling or dry crossings as reasonable alternatives to any 318 authorization required for this project.”

p. 5-3, Water Resources Impact Severity for process water diversion for generation plant operations: change “A” to “S”.

Page 5-8, Table 5-1, Socioeconomic Resources: under the first two actions in the first column ("action" column), add "and pipeline construction" to the words already there in that first column("Generation Plant construction and operation").

Page 5-8, Table 5-1 under "Infrastructure" change the information under Pipeline Construction, Pipeline Failure, and Pipeline closure as follows:

Infrastructure	Impact	Proposed Action	Mitigation Alternative
Pipeline Construction	Impediment to the through mobility of a roadway	A	A
	Reliability of natural gas pipeline	B	B
Pipeline failure	Especially for pipeline failures affecting I-90 (authorized for semi triple trailers): roadway closures; damage to rights of way; contamination of right-of-way material; detour of traffic and corresponding damage to detour roadway; loss of goods and services to public	S	A
Pipeline closure and reclamation	Impediment to the through mobility of a roadway	A	A

p. 9-4 Second citation on page change to ‘Duffield’, from Duncan.

p. 9-4 Add the following citation: “Duffield, John, and S. Allen. 1988. Helena: Montana Department of Fish, Wildlife and Parks. “Contingent Valuation of Montana Trout Fishing by River and Angler Subgroup”.

p. A-2 Add this text to the second paragraph after the first sentence: “The department shall review each application for short-term standard on a case-by-case basis to determine whether there are reasonable alternatives that preclude the need for a narrative standard.”

p. A-3: Water Rights Bureau, reference to the Cut Bank segment.